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10/829,531	04/21/2004	Libin Chen	BSPAP011	7319

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Peter B. Martine
MARTINE & PENILLA, LLP
Suite 170
710 Lakeway Drive
Sunnyvale, CA 94085

EXAMINER

D ADAMO, STEPHEN D

ART UNIT PAPER NUMBER

3636

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,531

Applicant(s)

CHEN, LIBIN

Examiner

Stephen D'Adamo

Art Unit

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 positively claims “a U-shaped hinging element” on lines 6 and 8. It is confusing and unclear whether the applicant is claiming the same U-shaped hinging element or another U-shaped hinging element. It is suggested to include terminology that distinguishes the two elements from one another. Specifically, it is suggested to use terminology such as “first” and “second”.

Similarly, claim 1 also positively claims “an eccentric U-shaped hinging element” on lines 10 and 13.

Moreover, claim 1 positively claims “a pair of arms” on line 3 and further claims “an arm” on line 14. It is unclear whether a third arm is being claimed on line 14 or if the arm is already identified with “a pair of arms” claimed on line 2.

Claim 6 recites, “said curved support tubes” on line 2, which lacks antecedent basis.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3636

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Zheng (6,634,705).

Zheng discloses an armrest arrangement for a foldable chair comprising two back rest tubes 34, two seat frame tubes including both frame members 31, 33, two front crossed tubes 11, 12, a pair of rear crossed tubes 21, 22, a chair fabric 201, 202, and a pair of arms 51. Zheng's chair is symmetrical from left to right and each back rest tube is connected crosswise to one of the seat frame tubes. The upper portion of each rear crossed tube is connected to one of the two back rest tubes via a U-shaped hinging element, seen in Figure 1. A lower portion of each rear crossed tube is connected to one of the two seating frame tubes via another U-shaped hinging element. Further, the two front crossed tubes are cross-wise connected and an upper portion of each tube is connected to one of the seating frame tubes via an eccentric U-shaped hinging element and a fixing element (seen below). The lower portion of each of the front crossed tubes is connected to the lower portion of one of the backrest tubes via an eccentric U-shaped hinging element (also seen below). The upper portion of the front crossed tubes are provided with an arm 511 and the chair fabric is sleeved over the seating frame tubes and the back rest tubes, as shown with the dotted lines in Figures 1 and 2. The eccentric U-shaped hinging elements have U-shaped bodies with connection holes and tube insertion notches. As noted by the dashed lines below, there is an

Art Unit: 3636

eccentricity between a center of the connection hole and a center of the tube insertion notch.

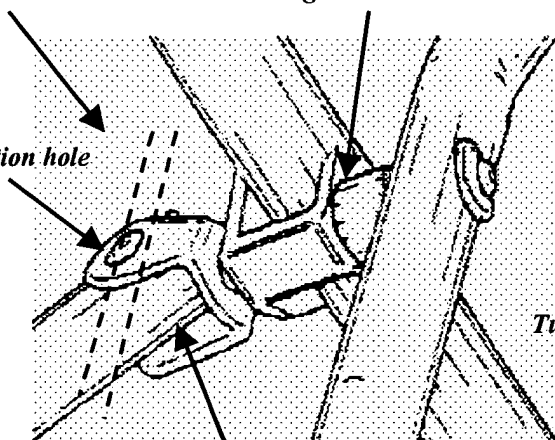
Regarding claims 4 and 6, the pair of arms is rigid. As disclosed in Figure 3, The front arms are sleeved over upper ends of the curved support tubes 521 with slider slots 512. Note the upper portions of the support are curved. The rear portions of the rigid arms are fixed respectively on the back rest tubes at a pivoting joint (also disclosed in Figure 3, but not labeled).

Regarding claim 7, the front outside of each of the seating frame tubes are provided with a support tube 52, which is connected to one of the arms, thus forming a quadrangular structure.

*Eccentric U-shaped
hinging element*

Fixing element

Connection hole



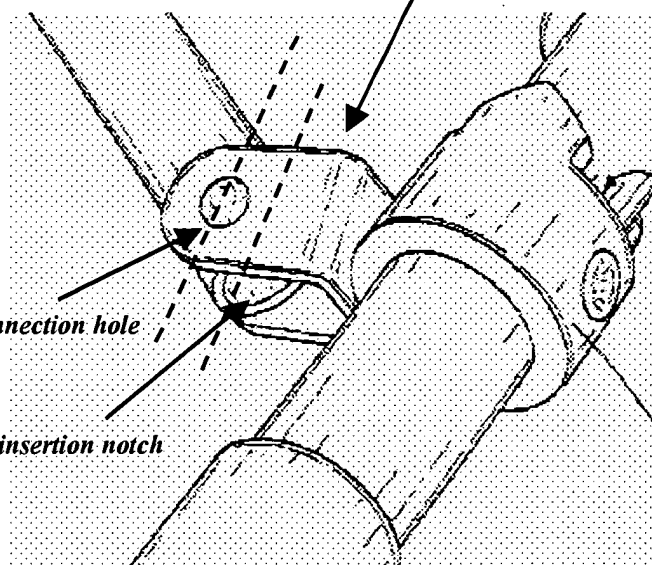
Tube insertion notch

*Upper portion of front
crossed tubes*

*Eccentric U-shaped
hinging element*

Connection hole

Tube insertion notch



*Lower portion of front
crossed tubes*

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng (6,634,705) in view of Cole (1,027,692).

Zheng discloses an armrest arrangement for a foldable chair comprising two back rest tubes 34, two seat frame tubes including both frame members 31, 33, two front crossed tubes 11, 12, a pair of rear crossed tubes 21, 22, a chair fabric 201, 202, and a pair of arms 51. Zheng's chair is symmetrical from left to right and each back rest tube is connected crosswise to one of the seat frame tubes. The upper portion of each rear crossed tube is connected to one of the two back rest tubes via a U-shaped hinging element, seen in Figure 1. A lower portion of each rear crossed tube is connected to one of the two seating frame tubes via another U-shaped hinging element. Further, the two front crossed tubes are cross-wise connected and an upper portion of each tube is connected to one of the seating frame tubes via an eccentric U-shaped hinging element and a fixing element (seen above). The lower portion of each of the front crossed tubes is connected to the lower portion of one of the backrest tubes via an eccentric U-shaped hinging element (also seen above). The upper portion of the front crossed tubes are provided with an arm 511 and the chair fabric is sleeved over the seating frame tubes and the back rest tubes, as shown with the dotted lines in Figures 1 and 2.

Art Unit: 3636

However, Zheng fails to expressly disclose a support reinforced block at the crossed connection point. Yet, Cole teaches of a “foldable frame for chairs” having a similar structure, without the arm rests. Cole teaches of a two front crossed tubes 1 “pivotally secured to one to the other midway of their length by the pivot pin 2....3 are plates having the center orifice 4 therethrough and secured to the pivot pin 2 between the bars 1” (lines 58-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the front crossed tubes of the foldable chair of Zheng with a reinforced block, as taught by Cole, for providing a more secure joint of the crossed members.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng (6,634,705) in view of Tang (6,322,138).

Zheng discloses an armrest arrangement for a foldable chair comprising two back rest tubes 34, two seat frame tubes including both frame members 31, 33, two front crossed tubes 11, 12, a pair of rear crossed tubes 21, 22, a chair fabric 201, 202, and a pair of arms 51. Zheng’s chair is symmetrical from left to right and each back rest tube is connected crosswise to one of the seat frame tubes. The upper portion of each rear crossed tube is connected to one of the two back rest tubes via a U-shaped hinging element, seen in Figure 1. A lower portion of each rear crossed tube is connected to one of the two seating frame tubes via another U-shaped hinging element. Further, the two front crossed tubes are cross-wise connected and an upper portion of each tube is connected to one of the seating frame tubes via an eccentric U-shaped hinging element and a fixing element (seen

above). The lower portion of each of the front crossed tubes is connected to the lower portion of one of the backrest tubes via an eccentric U-shaped hinging element (also seen above). The upper portion of the front crossed tubes are provided with an arm 511 and the chair fabric is sleeved over the seating frame tubes and the back rest tubes, as shown with the dotted lines in Figures 1 and 2. However, Zheng fails to expressly disclose a an upper portion of each front crossed tube extending upward to curved support tubes. Yet, Tang teaches of a “collapsible patio chair” comprising similar front crossed tubes 12 and 14 having an extended upward portion 65 forming curved supports 66. Tang teaches of soft arm rests 15 wherein the front ends of the armrests are sleeved over upper ends of the curved support tubes, as seen in Figure 4. Further Tang teaches of rear portions of the soft arm rests fixed respectively on the back rest tubes, similar to Zheng’s arm rest rear portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the arm rest supports of Zheng with an extension of the front crossed tubes for arm rest supports, as taught by Tang, for providing a flexible and less bulky armrest structure.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zheng (6,824,208), Liu (6,595,582), Wu (6,547,321), Zheng (6,499,906), Chen (6,488,331), Tsai (6,149,238), Singer (5,058,948), Milette et al. (3,836,194), Moore et al. (2,787,3160, Tseng (2002/0125744) and Hultman (EP 640,304) all show various features of the claimed invention.

Art Unit: 3636

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen D'Adamo whose telephone number is 571-272-6857. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pete Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SD

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April 15, 2005


Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600